

In re Application of: Oren GLOBERMAN
 Serial No.: 10/517,938
 Filed: August 9, 2005
 Office Action Mailing Date: July 26, 2010

Examiner: Kevin Thao TRUONG
 Group Art Unit: 3734
 Attorney Docket: **38309**
 Confirmation No.: 3765

In the Claims:

1. (Currently Amended) A balloon catheter, comprising:
 an elongate body adapted for insertion into a blood vessel;
 a balloon attached to a distal end of said body; said balloon having a proximal end and a distal end, and including a longitudinal fold on its outer surface;
 a guide-channel adapted to carry at least a guide-wire located within said fold;
 and,
~~an entry a first port into in~~ said guide-channel for said guide wire at one end of said balloon; and
~~wherein said balloon includes an exit a second port in said guide-channel for~~
 said guide wire located intermediate from the proximal and distal ends of said balloonsaid guide channel in said fold.
2. (Withdrawn) A catheter according to claim 1, wherein said entry port is proximal to said tool.
3. (Canceled)
4. (Withdrawn) A catheter according to claim 1, wherein said guide-channel is adapted to carry a second catheter.
5. (Withdrawn) A catheter according to claim 4, wherein said second catheter is a balloon catheter.
6. (Canceled)
7. (Withdrawn) A catheter according to claim 1, comprising a second guide-channel adapted to carry a second guide wire.

In re Application of: Oren GLOBERMAN
Serial No.: 10/517,938
Filed: August 9, 2005
Office Action Mailing Date: July 26, 2010

Examiner: Kevin Thao TRUONG
Group Art Unit: 3734
Attorney Docket: **38309**
Confirmation No.: 3765

8. (Withdrawn) A catheter according to claim 7, wherein said two guide-channels share a common lumen section.

9. (Withdrawn) A catheter according to claim 8, wherein said second guide-channel defines an aperture in its side for said distal exit.

10-12. (Canceled)

13. (Previously Presented) A catheter according to claim 1, wherein said balloon includes a stiffening which defines said guide-channel.

14. (Withdrawn and Currently Amended) A catheter according to claim ~~12~~1, wherein said balloon includes adhesive which adheres two parts of said balloon to define said guide-channel.

15. (Withdrawn and Currently Amended) A catheter according to claim ~~10~~1, wherein said balloon is split to define said channel between two sections of said balloon.

16. (Withdrawn) A catheter according to claim 15, wherein said balloon is axially split.

17. (Withdrawn) A catheter according to claim 15, wherein said balloon is trans-axially split.

18. (Previously Presented) A catheter according to claim 1, further comprising a stent.

In re Application of: Oren GLOBERMAN
Serial No.: 10/517,938
Filed: August 9, 2005
Office Action Mailing Date: July 26, 2010

Examiner: Kevin Thao TRUONG
Group Art Unit: 3734
Attorney Docket: **38309**
Confirmation No.: 3765

19. (Previously Presented) A catheter according to claim 18, wherein said stent is mounted on said balloon.
20. (Withdrawn) A catheter according to claim 19, wherein said guide-channel is defined between said stent and said balloon.
21. (Canceled)
22. (Previously Presented) A catheter according to claim 1, wherein said guide-channel is wide enough to accommodate a second balloon catheter.
23. (Withdrawn) A catheter according to claim 18, wherein said guide-channel is defined by a crimping of said stent.
24. (Withdrawn) A catheter according to claim 18, wherein said stent includes a dedicated aperture along its length for said exit port.
25. (Withdrawn) A catheter according to claim 18, wherein said stent defines two guide-channels.
26. (Withdrawn) A guiding stent comprising a stent body crimped in a radially non-uniform manner to define at least one guide-channel adapted to carry at least a guide-wire.
27. (Withdrawn) A stent according to claim 26, wherein said channel is designed to accommodate only a single guide-wire.
28. (Withdrawn) A stent according to claim 26, wherein said channel is designed to accommodate a plurality of guide-wires.

In re Application of: Oren GLOBERMAN
Serial No.: 10/517,938
Filed: August 9, 2005
Office Action Mailing Date: July 26, 2010

Examiner: Kevin Thao TRUONG
Group Art Unit: 3734
Attorney Docket: **38309**
Confirmation No.: 3765

29. (Withdrawn) A stent according to claim 26, wherein said channel does not extend along an entire length of said stent.

30. (Withdrawn) A stent according to claim 26, wherein said channel is adapted to carry a balloon catheter.

31. (Withdrawn) A stent comprising:
an elongate cylindrical body; and
an aperture defined in a middle section of said body, said aperture including two abutting sections, one of said sections being narrower than the second section at least at said junction.

32. (Withdrawn) A stent according to claim 31, wherein said stent is defined by a plurality of circumferential expandable bands inter-linked by a plurality of axial links.

33. (Withdrawn) A stent according to claim 32, wherein said stent has a regular pattern and wherein said aperture is defined by the lack, in said pattern, of one axial link and by the lack of a section of an expandable band between two axial links.

34. (Withdrawn) A stent according to claim 32, wherein said axial links include at least one protrusion and wherein axial links abutting said aperture are configured to have their protrusion point away from said aperture.

35. (Withdrawn) A stent according to claim 31, wherein said stent is adapted to be placed in a target vessel having a varying diameter along the length of the stent and wherein the aperture is narrower towards an end of the stent adapted to be in a narrow wider section of the target vessel.

In re Application of: Oren GLOBERMAN
Serial No.: 10/517,938
Filed: August 9, 2005
Office Action Mailing Date: July 26, 2010

Examiner: Kevin Thao TRUONG
Group Art Unit: 3734
Attorney Docket: **38309**
Confirmation No.: 3765

36. (Withdrawn) A stent according to claim 31, wherein said junction is adapted to be obliterated by expansion.

37. (Withdrawn) A stent according to claim 31, wherein said aperture is configured to allow passage of an unsheathed balloon catheter passing through it, without snagging of the balloon.

38. (Withdrawn) A stent according to claim 31, wherein said stent is adapted to radially expand more in a portion of the stent to one side of the aperture than in a portion of the stent to the other side of said aperture.

39-76. (Cancelled)

77. (Currently Amended) A catheter according to claim 1, wherein said entry port is at the proximal ~~an~~ end of said balloon.

78. (Currently Amended) A catheter according to claim 1, wherein ~~said an~~ entry port for said guide wire into said guide channel is at a distal end of said balloon.

79-80. (Canceled)

81. (Previously Presented) A catheter according to claim 18, wherein said stent includes a dedicated aperture along its length for said exit port.

82. (Withdrawn) A method of folding a balloon to form a channel, comprising:
(a) providing a balloon catheter having a balloon folded over said catheter;
(b) providing an elongate element between said folds on an outer surface of said balloon, along at least a part of an axial section of said balloon;
(c) providing said elongate element with a bend;

In re Application of: Oren GLOBERMAN
Serial No.: 10/517,938
Filed: August 9, 2005
Office Action Mailing Date: July 26, 2010

Examiner: Kevin Thao TRUONG
Group Art Unit: 3734
Attorney Docket: **38309**
Confirmation No.: 3765

(d) manipulating said elongate element such that said bend moves in a proximal direction and travels along a contact area between said folds; and

(e) refolding any part of said balloon unfolded by moving said bend.

83. (New) A catheter according to claim 1, wherein an entry port for said guide wire into said guide channel is located at the proximal end of said balloon.

84. (New) A catheter according to claim 1, wherein an entry port for said guide wire into said guide channel is located at the distal end of said balloon, and an exit port for said guide wire from said guide channel is located intermediate the proximal and distal ends of said balloon.

85. (New) A catheter according to claim 1, wherein an entry port for said guide wire into said guide channel is located intermediate the proximal and distal ends of said balloon, and an exit port for said guide wire from said guide channel is located at the proximal or the distal end of said balloon.

86. (New) A catheter according to claim 1, wherein second port is located approximately equidistant the proximal and distal ends of said balloon.

87. (New) A catheter according to claim 1, further including a second guide wire.

88. (New) A catheter according to claim 87 wherein said second guide wire is located in said guide-channel.

89. (New) A catheter according to claim 87 wherein said second guide wire exits said guide-channel through said second port.

In re Application of: Oren GLOBERMAN
Serial No.: 10/517,938
Filed: August 9, 2005
Office Action Mailing Date: July 26, 2010

Examiner: Kevin Thao TRUONG
Group Art Unit: 3734
Attorney Docket: **38309**
Confirmation No.: 3765

90. (New) A catheter according to claim 1 wherein said second port is oriented so that said guide wire passes therethrough in a non-axial direction.